

The authors would like first to thank the editor for the comments provided. There is no doubt that those comments improve the manuscript.

Line 72-73: "Remote sensing represents an attractive alternative for that purpose". Many of the techniques described in the preceding paragraphs are remote sensing. Be more specific here as to the methods you're referring to, e.g. "airborne remote sensing"

Done.

Line 114: remove "is" between studies and provides

Done.

Line 126: remove the word "tentatively"

Done.

Line 132: write out acronym in first use: "Bassin Versant Experimental (BVE) Ste-Marthe"

Done.

Line 141: Should this say "February 26 corresponded to the end of the accumulation period..." instead of "onset"?

Yes, this has been modified.

Line 155: For equation, remove the period or use 'x' or '*' for multiplication, i.e. $SWE=h \times p$

Done.

Line 194: remove period and space between "probe" and "value"

Done.

Line 296: Looking at Figure 3, I think this sentence should say "by" instead of "to", as in "...increased both the SWE and relative snow density by 15 mm equivalent and 0.05 mm, respectively". Also, shouldn't relative density be unitless?

Yes and yes, these two point have been modified.

Line 306: Not sure what is meant by "of almost M.E.2". I think this sentence could be reworded to "A second mild episode (M.E. 2) started on March 8 and ended March 12, the day of the third survey"

Part of the former sentence wasn't removed: more than three days "of almost uninterrupted above 0°C air temperatures". As Mild episodes are now defined as "more than 24-hour-long periods with continuous above-zero air temperatures", this as been modify as suggested.

Line 388: remove "almost"

Done.

Line 400: I suggest using "non-zero" instead of "non-nulls"

Done.

Figure 1d: "Altitude" typically refers to flight height above ground. I think these plots are showing elevation profiles, in which case I suggest changing the labels to "elevation"

Figure 8: Somewhere in the caption or figure it should say what the source of the data is, i.e. 8a snow depth results from photogrammetry, 8b LWC from drone-based GPR, etc. I suggest adding letters to each chart (a, b, c, d) with a corresponding description in the caption which relates back to the text.

Done.

Line 269-270: Equation (8) and (9) were miss written the exponent of the second LWC as been added: $\varepsilon'_s = (0.1LWC + 0.8LWC^2)\varepsilon'_w + \varepsilon'_d$, (8)